Your Second Selves: Resources, Agency, and Constraints in Avatar Designs and Identity Play in a Tween Virtual World

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ABSTRACT

Avatars in online games and worlds are seen as players' key representations in interactions with others. It is surprising then that this aspect of game play has not received much attention in research, in particular what concerns player-generated avatars. In this paper, we investigate the avatar design and identity play within a large-scale tween virtual world called Whyville.net with more than 1.5 million registered players ages 8-16. One unique feature of Whyville is the player's ability to customize one's avatar with various face parts and accessories, all designed and sold by other players in Whyville. Our findings report on the expressive resources available for avatar construction, individual tween players' choices and rationales in creating their avatars, and online postings about avatar design in the community at large. With the growing interest in player-generated content for online worlds such as Second Life, our discussion will address the role of avatars in identity play and self-representation as well as the social issues that arise within the game world.

Author Keywords

Avatars, identity, participatory culture, situated play

INTRODUCTION

More than 20 years ago, Sherry Turkle [20] wrote the influential book, *The Second Self: Computers and the Human Spirit*, that introduced the idea that computers were not just tools for work but also for exploration of oneself. In her follow-up publication, *Life on the Screen: Identity in the Age of the Internet* [21], she expanded these investigations to include the new genre of online game worlds that created opportunities for players to assume a different identity such as adopting a fictive name or assuming a different gender [1,18]. Today, players create their online representations, called avatars, in the form of graphical designs that can take on more and more realistic detail. These avatars are not ephemeral and spurious creations: players spend considerable time selecting and customizing them and then interacting with others online [24]. Several researchers have begun to articulate differing purposes for creating avatars in specific ways: uses of imaginary versus realistic representations, levels of consciousness/purpose in expressing identities in avatars, and the role of the medium (e.g., tools, instant messenger versus internet relay chat) in influencing self-disclosure [3, 9, 12].

While there is research on how players interact with avatars in virtual environments [14, 15], few studies have focused on how players create avatar designs for other players. Commercial games provide players with menus of choices for selecting avatar types and for customizing clothing, hair and other features of their appearance. In contrast to these select-from-a-menu choices of most multiplayer online games, virtual worlds such as *Second Life* are entirely based on player-generated content. The avatar types and customizations are designed by the players themselves rather than by professional designers employed by game companies. Taylor [19] illustrated how organizational, technical, and economic factors and values about immersion, identity, and legitimacy determine in which ways game designers structure virtual environments and content available to players. For these reasons, avatars designed by players might offer a particularly promising window into understanding how participants in these worlds (as designers and players) think about their representations of self in virtual life – to adapt the title of Goffman's famous treatise [4]. Given broad choices in creating avatars, how do players respond and how do they conceptualize their online visual representations in relation to themselves? In addition, how are these representations situated in the larger social context of an online game world?

We have chosen to investigate these questions within the context of a large-scale tween virtual world, called Whyville.net, because the notion of second selves is of particular relevance for teen players. Adolescence is recognized by many as a critical time period for teens' development of identity[2, 11] as they decide which groups they identify with, what kind of persons they wish to be within those groups, and what is required to be become those persons [10]. Being on the Internet is an increasingly important part of teen social life as they initiate and develop

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relationships through participation in email, chat, blogs, and virtual worlds [13]. In Whyville, players have the ability to customize their avatars with various two-dimensional face parts and accessories, all drawn and sold by other players on Whyville. Thus most of the limitations posed by the menu-selection tools in commercial games are not be present. Hence avatar design features in Whyville offer an unprecedented opportunity to examine how tween and teen players design and discuss their representations situated in a particular virtual world.

The framework for our analyses of online representations of self draws from Goffman's work [4] in which he describes how people negotiate and validate identities in face-to-face encounters and establish ways to evaluate the meaning of these encounters. Goffman proposed to think about everyday life as a stage in which we perform "face-work" [5] which may be defined as "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact." Virtual worlds like Whyville can be thought of as a stage where the teens represent themselves and perform via their avatar creations. If we adopt the idea of 'face-work' for the context of avatar creation, then we can begin to understand the interplay between individual agency, i.e, what the player intends to accomplish, and social structures, i.e., the constraints imposed by community expectations, that impact the representation of oneself.

For our study, we then propose to examine three different aspects – resources, constraints, and agency – that situate the representations of self in avatar design on Whyville. As a starting point, we want to consider the "expressiveness" of the individual player [5], how the number and variety of face parts available to create your avatar provide a good indicator of the expressive resources at hand for players to represent themselves in their avatars in Whyville. We also wanted to examine how individual agency comes into play by interviewing tween players about the choices and reasoning they used in creating avatars. Finally, we needed to understand how social constraints imposed the community interacted with individual agency in avatar creation. As Goffman argued, "if an encounter or undertaking is to be sustained as a viable system of organization... then these variations must be held within certain bounds and nicely counterbalanced by corresponding modifications in some of the other rules and understandings" [5]. While there are many places where we could observe such rules or constraints, we decided to focus on a public forum and repository in which players discussed and created fashion guides about the adequacy of looks. For each of these three aspects, we used separate data collection and analysis methods: an analysis of the available avatar parts created by players; interviews with a group of tween players and their choices and rationales in creating their avatar(s); and, the postings in an online newspaper, called *The Whyville Times*, about topics relating to avatar designs.

METHODS

In order to discover the full scope of expressive resources available for avatar design on Whyville, we selected a day, September 20, 2006, to visit Akbar's Face Mall and assess the variety and types of parts for sale. We used the pull-down menus built into the Akbar's search tool to record the total number of parts for sale on that day (presented in the opening screen of Akbar's) and the number of parts for sale in each of Akbar's categories. Further, we also engaged in our own face part design to better understand the primary tool used to draw face parts. In addition, we each logged hundreds of hours on Whyville: shopping, trading, assembling, and even designing our own face parts.

To understand players' agency in avatar creation and their individual reasons for choosing certain looks, we conducted a series of individual and group interviews with tweens between the ages 9-12 who had spend between 3-6 months in Whyville. We started the interview with questions like, "How is your avatar like you and/or not like you," "How often do you change your avatar," and engaged in conversations about their avatars stemming from those questions. We transcribed interviews from 35 tweens and analyzed them for reasons why youth created their avatars the way they did, listing every reason youth gave and grouping them into themes. Since some youth had more than one reason for making a particular look, or some youth changed their looks periodically, the themes are not mutually exclusive. Thus for 35 youth, we listed 44 reasons for creating a particular look and grouped those into six major themes, with 2-4 sub-themes each. While one of the authors did the primary coding and grouping, themes were checked, revised, and rechecked by the other authors.

Finally, the primary means for studying the community constraints was combing Whyville's weekly citizen-run newspaper, *The Whyville Times*, which is written though not edited by players, for articles pertaining to how the community perceived avatar creation. We used word searches to find relevant articles ("face parts," "avatar," "Akbar," and "fashion") and grouped the articles by theme, analyzing them for social meaning-making about avatars. Searching the newspaper had inevitable limits for understanding community discussion on Whyville as a whole because one of the game designers performs the role of editor, and obviously not every article written by players made it into the weekly newspaper. Still, studying the formally written articles by players allowed for a systematic search and turned up a number of different perspectives that form part of the social background of avatar design on Whyville.

RESOURCES, AGENCY AND CONSTRAINTS IN AVATAR DESIGN
Whyville.net is a large scale multi-user virtual environment (MUVE) with over 1.5 million registered players that encourages youth ages 8-16 to play casual science games in order to earn a virtual salary (in 'clams'), which youth can then spend on buying and designing parts for their avatars

(virtual characters), projectiles to throw at other users, and other goods. The general consensus among Whyvillians (the citizens of the virtual community of Whyville) is that earning a good salary and thus procuring a large number of clams to spend on face parts or other goods is essential for fully participating in the Whyville community [7]. Social interactions with others are the highlight for most Whyvillians and consist primarily of ymailing (the Whyville version of email) and chatting on the site where users are visible to each other on the screen as floating faces (see Figure 1). Players consider appearance to be important in Whyville for making friends and flirting with members of the opposite sex [6]. In other words, looking "good" is a way of demonstrating social status and more likely to get people to talk to you. Beauty contests are frequent – both as formal Whyville contests at special events like Valentine's Day (see Figure 1) and spontaneous player-initiated contests with offers of clams for whoever looks best according to the initiator's opinion.

Figure 1: Valentine's Day Beauty Contest in Whyville

Resources for Avatar Design
Since player-created faces are the primary representation of one's self on Whyville, looks are very important and can show relative experience. Newbies (or new players) stand out as smiley faces (see Figures 1 and 2), and one of the first tasks newcomers take on is creating a face. The first try at a face usually is not too attractive as new players have no clams (the currency in Whyville) and have to make do from donated parts gathered at Grandma's, the online charity in Whyville. However, once a player starts to collect a salary, the spending money can be used on face parts designed by other users. These parts, sold at Akbar's Face Mall, are generally much more nuanced and carefully designed, visible in the contrasting faces that represent the progression of one of the authors in assembling her face (see Figure 2). Overall, face-work on Whyville can include four different elements, which we describe below: shopping for a face, assembling a face, and designing and selling face parts.
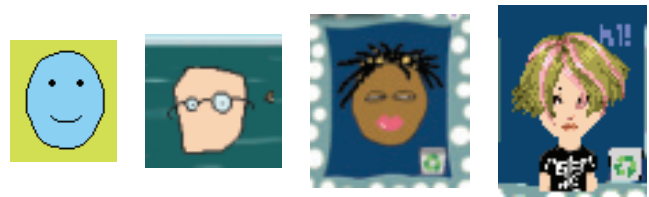

Figure 2: Progression of one author's face from newbie to "normal."

Shopping for Avatar Parts
Shopping for a face, in other words going beyond Grandma's donated "newbie" parts, presents Whyvillians with a rich opportunity for customization. As of September 20, 2006, there were over 30,000 face parts for sale at Akbar's Face Mall, including 1,679 player-owned stores that sold an average of 18 parts per store. Shoppers can search for parts by name (for example by "santa" when looking for a Santa hat), browse stores by name (which probably shows an affinity for a particular designer), or select a category of parts from a pull-down menu. On this menu, there are 54 categories of parts. These are classified into nine major groups: face, hair, clothes, jewelry, makeup, pets, sports, food, and misc. Of these, face (10%), clothes (12%), sports (32%), and hair (32%) make up the majority of parts (see Figure 3). As Whyvillians ourselves, we can attest to the importance of good hair!
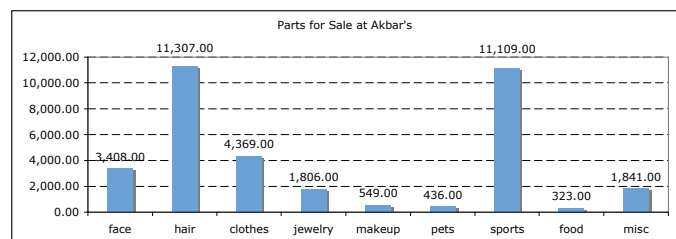
Figure 3: Categories of face parts for sale at Akbar's.

Within the major groupings, there are a large variety of face parts available. Each major group contains smaller categories of parts, and within each of these categories there are sometimes thousands of parts. For instance, the "face" group includes heads, mouths, noses, eyes, ears, and eyebrows, with mouths and eyes making up more than two-thirds of the total face parts. A closer look at the available heads shows that they fall into roughly three categories, blank heads for face building, novelty heads (such as Halloween masks, animal heads, etc.) and so-called "newbie heads" which seem to be marketed to new members as one-stop-shopping, a way to quickly get rid of

your newbie smiley face and blend in before you are ready to customize your look (see Figures 4 and 5).

Figure 4: Assortment of heads available at Akbar's.

Figure 5: Other various parts at Akbar's: Hair, skateboard, eyes, body, necklace, and beard.

Assembling an Avatar

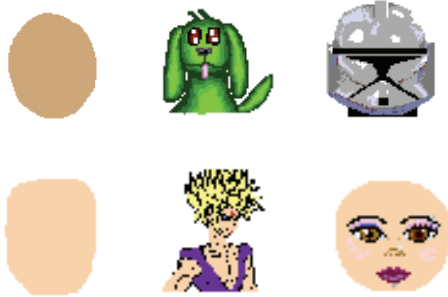After buying the desired face parts from Akbar's Face Mall, one goes on to assemble one's face, or "Pick Your Nose" as it is called in Whyville. There are cultural norms about the placement and layering of parts (be sure to put on your hair before your body or the hair will cover it up as in the second picture from the left of Figure 6). For one of the author's avatars shown below, getting the height of the eyes just right was challenging – too high and the hair covers them up too much, too low and the face looks smashed together. Several steps in the development of a "look" are shown below. From left to right, the eyes are layered on the head; followed by nose and hair; addition of mouth, adjustment of the hair and layering the body on top of the hair; adding a necklace and beret, and finally changing the body and adding snowflakes as decoration on the beret (for a snazzy winter look).

Figure 6: Composing an avatar.

Designing and Selling Avatar Parts

Designing face parts on Whyville can be a difficult process, but many Whyvillians have apparently had great success designing and then selling their face parts. In the upper left of Figure 7 the initial choices are laid out for the artist including palette size and the category label for the part. All face part production costs clams, and the larger the face part, the more clams it will cost (in Figure 7 one of the authors attempted a head at the 200 x 200 pixel size, which cost her 100 clams to design and 20 clams for each part she produced for sale). Once the category, name, and pixel size has been decided, the drawing area is revealed. The color palette is on the right and the four drawing "brushes" are on the far left – each is a square of different size (see upper right picture in Figure 7). The picture on the middle left shows a first attempt to outline a head with the largest brush in a dark brown color, shown as an X on the 4th palette down in the lower right of that rectangular assortment of colors. The "Preview" option allows designers to compare the face part against their current face (lower left). Finally, when the design is done, players must confirm that they have met all qualifications for face design on Whyville on a checklist (lower right) and submit it for approval to City Hall. Once approved the face part is added to Akbar's face mall and potentially a player's individual or cooperative store.

Figure 7: Designing face parts: Initial choices, drawing palette, preview, and checklist for approval

Agency in Avatar Design

One of the first questions we asked tweens in their interviews was whether or not their avatar was like them, and how or how not. In almost every case the tween said no,

though they qualified their answer when pressed. Consider the way Kelly responded to this question:

Interviewer:	How does your face look like you?
Kelly:	I have brown hair and I have a nose and –
Interviewer:	And how's it different?
Kelly:	I don't have a bear head and my hair is a lot longer and I don't wear those shirts.

Kelly's answer of the obvious, "I don't have a bear head," demonstrates the falsity of this question. While we as researchers had assumed that there was intentional and explicit physical rendering of oneself or, opposite, a purposeful fantasy play in designing one's avatar, Kelly firmly shut down our prior assumption, although as the interviews reveal, these motives were not absent from all of the youth.

Why this look?
Overall, tweens listed six, non-mutually exclusive reasons for creating their avatars the way they did: the pure aesthetics of a look (10), to make it in part like their 'real' self (8), to affiliate with something or someone (7), because they can't have it in real life (6), to align oneself for or against a popular trend (7), and for a functional reason like disguise (6). The first reason for designing avatars a particular way was for the pure aesthetics of the look. For instance, some of the tweens would experiment with different themes to design their avatar, in part as a challenge: "I try to pick themes and sometimes they are dorky I think, but I just try to have fun and change it." Others simply made a look that they thought was good: "because I liked it that way." And others seemed to rise to an artistic level of design, looking for matching parts or patterns: "I just wanted all of this black and on the background I wanted to see more patterns…so no one could see that I was a dead guy." None of these reasons were associated with how the tweens looked or wanted to look in real life; the motivation was artistic, taking matching or disparate parts and molding them into a look that appeared attractive to them.

In contrast, some tweens did make their avatars similar to themselves either in physical appearance or in personality. One tween said that his avatar had "my look – the chin thing, it has the wings, it has the sunglasses." Presumably he chose the head at least in part for a shape similar to his own (i.e., his chin). Taking this a step further, another young man described his avatar by saying, "we both like to wear necklaces," and went on to describe the cross necklaces that he and his avatar both wore. Using "we" to describe both himself and his avatar seems to express a relationship akin to a friend. This player viewed his avatar not as a direct expression of himself but as a separate entity with shared likes and appearance. Similar to physical appearance, one girl said that her avatar changed color a lot, just like her personality. Another would put a "bored" arm up when she felt bored, creating an expression of boredom where the avatar's chin was resting on her hand. In this way

these tweens used their avatars to show aspects of their 'real' selves – either physical or personal.

A related motivation for a particular avatar look was to affiliate with something or someone that the tweens liked, such as a video game character, relative, hobby, or nationality. For instance, one boy created his avatar because, "I like Dragon Ball Z and he looks like someone from Dragon Ball Z." This young man made his entire character to look like a favorite video game hero. In contrast, other tweens in this category would pick a single part that showed an affinity, like a baseball bat for a love of baseball or a shirt with a sister's name on it. One boy layered a Canadian flag over a popular hat "because that is where my mother was born and I lived there for two years and that hat was really popular." Another girl went a little further in looking for a style that reminded her of her mother, "those are kinda like the clothes that my mom wears sort of. I kind put her style into it." We know that these displays of affinity sometimes led to friendships on Whyville – conversations would start based on observations of shared interest in something displayed on a player's avatar.

Some tweens used the avatar to have a look or belonging that they could not have in 'real' life. Describing his avatar, one boy said, "I want to get a haircut like that but my mom won't let me." In this way, designing his avatar became a way to play out a look that he was not allowed to have in his non-virtual life. Similarly, while discussing her avatar, a girl remarked, "I wish I had black hair... [and] I don't have really pretty lips like she [her avatar] does." While the boy above was not allowed to have a particular haircut, the girl was playing out desires that were *impossible* for her to attain, namely natural hair color and "pretty lips." In this way, these tweens used their avatars to play out fantasies or desires unattainable in the rest of their lives.

Yet another reason tweens gave for choosing a particular look was to associate with or against a popular trend. Similar to fashion trends in 'real' life, certain face parts or looks came to be popular on Whyville, selling out at Akbar's and finding their way on to many avatars. As one boy expressed it, "I've been buying a lot of animated parts, yeah, that's pretty much it, cause animated parts are like the cool thing on Whyville I guess." This boy's reasoning for buying parts was not necessarily because they looked good or fit his personality but because they were popular. Similarly, another tween explained, "I take their looks and then if I see somebody I like again then I copy them...we were taking people's looks." Much as some people peruse magazines or fashion sites for looks to imitate, these youth copied other people's looks, seeing a face part on one Whyvillian and searching for it in Akbar's to put on their own face. But while six tweens affiliated themselves with popularity, one boy defined himself against the trend: "I wanted to look different from other people." Still, he oriented himself around the popular, even it if was in opposition to it.

While there are a number of reasons for designing avatars, all of the above tweens so far focused on looks. In contrast, some tweens focused on functionality rather than appearance. Several tweens chose to change their looks often, so that they could be disguised and "terrorize" other Whyvillians or sneak up on other people to eavesdrop or throw projectiles (a common pastime in Whyville). One girl used her look to deceive or surprise her friends:

> I sort change often and people would not recognize me
> because I sneak into people's conversations – sometimes
> they say like, "Who are you!?" Sometimes and then I
> say like, "blah blah blah", and sometimes I say the truth
> that I am from the 4th grade class or something.

By changing her look frequently she could appear as a stranger to her friends on Whyville, sneaking into their conversations and then surprising them with her real identity. This functional reason for avatar design plays into another use of avatars, that of creating multiple avatars.

Creating Multiple Selves
It is a common practice on Whyville to have more than one account. This is different than just changing the entire look of one's avatar: it is an entirely different user account with a different name. This mainly allows tweens to earn more clams since they can build up the salary on their second (or third, fourth, fifth and even tenth) account and send those clams back to their primary account, making them very rich indeed. But in addition to this money-making motive, alternative accounts can have other functions. For one, they allow the players to experiment with gender, as in the case of one 6th grade girl named Bev: "[My second account] is a boy! And it's called cuteguy and I just made it for more clams, but sometimes when I am bored I hang out in that account." Besides making her second account a boy, Bev claimed to create an entirely different look for cuteguy than her primary avatar, but did not express any alternative identity exhibited in his character. This is not surprising since Bev was among those who designed her avatar for aesthetic reasons, looking for matching items, changing her look often, and keeping it trendy. Additional avatars can serve other purposes as well. Another sixth grade boy called Walter used his second account as a disguise: "Well actually [my second account] is a girl account that I use to trick people that I don't like on Whyville. So if they mess with me I um – I don't know, I do something to them." So beyond monetary motives, some tweens invested in addition avatars for fun or to disguise themselves amongst friends.

Constraints in Avatar Design
Our searches through the archives of *The Whyville Times* demonstrate that avatars, looks, and fashion are important topics of discussion in Whyville. First, Whyville writers used the phrase "face parts" quite frequently. In fact, we found it in no fewer than 587 articles over the past 7 years, roughly equal to one article per week. Second, the Whyville community discusses fashion and looks habitually.

In our search under the word "fashion" we found 294 articles that mentioned the term. Reading through a random sample of these showed that at least 75% of these directly pertain to Whyville fashion (i.e., avatars), and not including other articles we found about looks on Whyville. So what do Whyvillians discuss about avatars, looks, and fashion on Whyville? For one, they openly share opinions about how to look good, where to shop, and how *not* to dress. For instance, layering eyebrows on top of rather than underneath hair is apparently uncouth to some. In addition, many authors shared tips about designing face parts and getting those designs approved for sale (going through the red tape). Some also criticized Akbar's for excluding their designs, delaying approval, or posing constraints on what was allowed (e.g., no below waist features on bodies).

Yet not all Whyvillians are consumed by what looks good or the logistics of making and selling parts. There were quite a number of authors concerned with using face parts for a cause, encouraging originality instead of popularity, confronting discrimination against the less good-looking of the community, and even crying for equal racial representation (literally "color"). Since looks are so important on Whyville, it is not surprising that when citizens have a cause to fight for (such as saving the town of Whyville) they would post it on their looks, even as fashion is used for a cause in 'real' life (think of all the T-shirts that advertise various causes in 'real' life). In addition, there were many writers who confront those who make fun of others for unusual looks. Challenging pressures to look a certain way, one anonymous author said,

> [T]o meet a person with the courage to stand out and express him or her self with face parts is very rare to find these days... Have variety in your appearance! Take advantage of life and the choice of so many face parts! [22]

This discrimination largely falls under class lines as newbies have less money to buy face parts. Further, several authors broached the issue of race in Whyville too, in the guise of a lack of non-peach colored heads and bodies. While we analyze this phenomenon more thoroughly elsewhere (for a more in-depth analysis see [8]), the activism surrounding racial representation on Whyville has led to a change in newbie head color from peach to blue, as well as an increased number of various shades of tan, brown, olive, and yellow heads and bodies.

The division and search for unity on Whyville reaches its pinnacle in the citizen interpretations of a computer glitch that came to be known as Tator Day. The history of Tator Day is an interesting one. Newbies (new players) on Whyville are given smiley faces when they start, often given the derogatory nickname "tator," probably because the faces look like pale, oblong potatoes. Starting in January 2005, occasional glitches in the server that stored face parts caused all faces on Whyville to resort back to the newbie, or tator, face. This came to be known and written about as "Tator Day." While it was accidental on the designers' part,

many Whyvillians began to celebrate Tator Day as an equalizing event, where the rich and poor, popular and unpopular, and newbies and oldbies were no longer distinguishable. As one Whyvillian wrote in *The Whyville Times*:

> Even though this day may not have been intentional or sent by the City Workers, even though it may have been just a computer glitch, I still grasp it as a day of acceptance, for many people. This day may just slightly bridge the gaps between all the stereotypes in Whyville. [17]

In fact while some complained about losing their face parts for a day, many Whyvillians enjoyed Tator Day as a community event, collaboratively posing for pictures (see Figure 8), playing practical jokes (telling people who just logged on that they were the only ones who had newbie faces and they had lost all their face parts), and generally greeting each other with "Happy Tator Day."

Figure 8: Whyvillians celebrate Tator Day.

DISCUSSION

Our paper title referenced Sherry Turkle's seminal publication *The Second Self* [20] and examined various aspects in tween's avatar creation as a representation of self in Whyville.net. We put forward the notion of second selves because it became apparent in our investigation that tweens venture out in multiple guises. The abundance of expressive resources, the large number of postings in the community forum about their experiences, and tweens' own multiple rationales speak to the relevancy of creating second selves. Like others before, we assumed a developmental need for tweens to create these online representations but we are also cognizant that life online provides room for multiple and flexible representations. Whyville is not a utopia but a community with evolving norms and discussions about them.

There are various ways to interpret what we heard tweens discussing about their avatars. Scholars like Turkle have argued to see participation in online activities as a sort of identity workshop for players [16]. Such attributions would assume a conscious effort on behalf of players to examine aspects of who they are. We think a better fit is the notion of an identity playground that can serve multiple purposes –

such as those listed by our interviewees. While gender play or swapping is perhaps one of the more prominently discussed aspects of online life [1], changes in Whyville can be more gradual – adding different accessories or mood elements that provide signals to others moving beyond looks. If we apply our notion of an identity playground to interpreting these nuanced changes, we can imagine how places like Whyville support a fluid notion of virtual identity, changing things little by little, experimenting with various looks (and even race and gender), playing with representations of one's 'real' self or a fantasy character, using various affinities to build different friendships, even using appearance for social activism.

Further, in Whyville 'second' selves does not adequately describe the creation and uses of multiple avatars. Although multiple avatars are generally not condoned on Whyville, in some cases they are recognized as legitimate citizens in their own right. For instance, in the regular senator elections on Whyville, stuffing the ballot (creating multiple avatars for the sole purpose of casting a vote) is considered immoral by most citizens and critiqued in *The Whyville Times*. However, the founders of Whyville as well as some citizens believe that if multiple avatars created by the same person are involved on Whyville and not just used as a second wage-earner, they should be given the rights of normal citizens. Consider the following argument by the adult editor of *The Whyville Times* in response to an article on ballot stuffing: "if you do use your additional accounts on a regular basis – if they're "alive", real citizens of Whyville – those accounts probably should have a right to vote too, don't you think?" [23]. This complicates any one-to-one identification with an avatar that we might imagine for Whyville players, or players of other video games for that matter. Adding to this the various "I," "we," "it," "he/she" terms applied to avatars by our interviewees and more questions are raised how players see their avatars in relation to themselves.

Previous research mostly examined the avatars provided in commercial video and role-playing games and menu choices available for customizing one's appearance. Such game worlds are designed with particular story lines in mind and thus the constraints imposed on the diversity of virtual characters ensure that the play experience stays within the boundaries of the fantasy world. Contrastingly, in Whyville the provision of all avatar content and interactions resides in the hands of players. Thus the purposes for creating avatars differ from other games; the primary purpose is to enhance socialization between players, a primary activity among teens. Quite interestingly, this incredible range of customization led to a number of social issues in regard to avatars – class stratification (newbie versus oldbie), pressure to fit in with the latest trend, and even inequitable racial representation. Further research is needed on how individuals use the broad resources of this environment to play and experiment with appearances, even

to the point of transgressing situated social boundaries, including flirting, cross-dressing, and supposed anonymity.

Two areas we have not yet explored are potential gender differences in the uses of avatars online and uses of avatars when known 'real' life friends are not around. Kang and Yang [9] found that in Korean avatar creation in Instant Relay Chat (IRC) females preferred more imaginary expressions of selves in the generally anonymous context of IRC versus Instant Messenger and were also more comfortable with self-disclosure in the former context than males. Do these trends hold up in the context of Whyville? We already have some evidence that tweens' publicly stated reasons for avatar design conflict with their online activity (seen in tracking and chat data) in Whyville when they think no one from their 'real' life is looking. By tapping into a large database of tracking and chat data for several hundred Whyvillian participants, we hope to expand this study to investigate differences in gender and supposedly anonymous contexts to further understand identity play with avatars in Whyville.

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